

**OBSERVATION REPORT NO. 3**

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Project: **Woburn Fire Headquarters**

Date: 09 June 2021

Location: City Hall Conference Room

Attendees: City of Woburn

Orazio DeLuca, Purchasing  
(Job Mtg. & Pre-Con)

Building Department

Brian Gingras, Inspector  
(Job Mtg. & Pre-Con)

Municipal Building Consultants (MBC)

Pat Saitta (Job Mtg. & Pre-Con)  
Dick Murphy (Job Mtg. & Pre-Con)

DiNisco Design (DD)

Rick Rice (Job Mtg. & Pre-Con)  
Anne Davis Woodacre  
(Job Mtg. & Pre-Con)

G&R Construction (G&R)

Ian McCallion (Job Mtg. & Pre-Con)  
Dave Bacchiocchi  
(Job Mtg. & Pre-Con)

GZA

Heather Audet (Pre-Con)

Glavin Construction

Kevin Glavin (Pre-Con)

Foley Buhl Roberts & Associates (FBRA)

Steve Belanger (Pre-Con)

RJP

Rene Peldient (Pre-Con)

Boston Concrete

Ben Raute (Pre-Con)

UTS

Chuck Fraser (Pre-Con)

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**Action      Date**

**A. SAFETY AND SECURITY**

G&R      05/14/21    A01.    Pest and Rodent Control plan to be submitted.

DOT      05/14/21      A02.2      Site Access / State Highway Permit. DPW has applied for the required permits from DOT. Until DOT issues the permit, G&R may use existing curb cut that is in the state highway ROW as long as it isn't modified. G&R may also implement the second access point to the south without DOT approval, because it is not in the DOT ROW.



DiNisco	06/09/21	A02.3	DOT Permit Review Comments: DOT has advised Woburn of three minor comments as a result of the permit application. DiNisco will issue a Field Order to G&R describing the revisions requested by DOT.
G&R	05/14/21 05/26/21 06/09/21	A03.	Barriers / Fencing / Gates: Site fences are in place. G&R to be provided a copy of the key to site fences. Site is currently stable with erosion control measures having been installed by ESP contractor. [05/26/21-Postscript: G&R will cut the links off the chain and use their own lock. The lock will be returned to the FD.] [06/09/21: Site is secured by G&R's lock. G&R will make key available to WFD via a Knox box affixed to the gate.]
G&R	06/09/21	A13.	Additional Fence Sections: In response to G&R's question, it was noted that there are additional fence sections at the Merrimack St. landfill available for use. G&R will contact DPW.

A14.

**B. OWNER ISSUES**

---	05/14/21 05/26/21 06/14/21	B01.3	Owner supplying Builder's Risk Insurance. [05/26/21-Postscript: The City has received a quote, which is under review. Once approved, the City will provide G&R with policy information.] [06/14/21-Postscript: Builders Risk Policy distributed by City on 06/14.] Record Item.
---	05/14/21 06/09/21	B01.4	Project Superintendent resume to be submitted. [06/09/21: G&R has provided the superintendent's resume.] Record Item.
City	05/14/21 05/26/21 05/28/21 06/09/21 06/09/21	B01.7	HVAC and Electrical Re-bids: The HVAC re-bids were received on 5/12 and the Electrical work is expected to be re-bid on 05/19. A change order will be issued to G&R for the difference in those sub-bids. [05/26/21-Postscript: It was noted that there is a protest over the HVAC bids received 05/19. Because this protest will take a week or more to resolve, DiNisco will issue a change order for the electrical re-bid so that Brothers may be signed by G&R.] [05/28/21-Postscript: A bid protest on the electrical re-bid has been filed, putting on hold the signing of Change Order #1.] [06/09/21: G&R has signed Change Order #1 following resolution of the Electrical Bid Protest. City to distribute fully executed copies after signature by Mayor.]
G&R	06/10/21	B01.9	HVAC Bid Protect (Postscript): On 06/09 the AG decided the HVAC Bid Protest and on 06/10 Change Order #02 was forwarded to G&R for signature.
---	05/14/21	B02.	Work under separate contracts will consist of:

DiNisco	05/14/21	B02.1	FF&E including Communications and Technology.
DiNisco	05/14/21 05/26/21 06/09/21	B02.2	Radio Tower (foundation by G&R). DiNisco noted that it is anticipated that the tower will be put out to bid with ITC Contractors in a couple weeks. [05/26/21-Postscript: DiNisco reported that the tower RFP is out for pricing.] [06/09/21: It was noted that the tower RFP's are due 06/25.]
Woburn MBC	05/14/21 06/09/21	B02.3	Traffic signal work will be bid by the City. [06/09/21: It was reported that the City has a signed contract for the signal work and it was noted that the signal cross arms have a six month lead time. MBC will work with the City Engineer to schedule a coordination meeting with G&R and City's signal contractor.
Woburn	05/14/21	B02.4	City will mill and pave Main Street after utility work is done.
G&R	05/14/21	B05.	Project Sign: Maintain existing sign. G&R to be added.
G&R	05/26/21	B06.	Subcontractor Bid Bonds: It was requested that G&R advise as filed subcontractors' contracts are finalized so that the City may return bid bonds.
City	06/09/21	B07.	Ground Breaking: Orazio Deluca will confer with the Mayor regarding a potential groundbreaking ceremony.

B08.

**C. PERMITS & INSPECTIONS**

G&R	05/14/21 05/26/21	C01.2	Permit Application Status Report: G&R gave permit information to Building Department at meeting. [Postscript: G&R still to provide workman's comp information.] [05/26/21-Postscript: G&R's workman's comp information was provided and the Building Permit has been issued. G&R was requested to email DiNisco and MBC a copy of the permit card.]
G&R	05/14/21 05/26/21 06/09/21	C01.3	Emergency Contacts: G&R to forward emergency contact information. [05/26/21-Postscript: G&R has provided cell phone numbers on the project directory. G&R will forward a copy of the directory to the Building Department.] [06/09/21: G&R will provide contact list updates as subcontractors are added.]

C04.

**D. CONSTRUCTION SCHEDULE**

G&R	05/14/21 05/26/21 06/09/21	D01.	Start-up / Mobilization: G&R expects to have their and the OPM's trailers on site 06/01/21. [05/26/21-Postscript: G&R reported that the trailers are now expected to be set up toward the end of the second week in June.] [06/09/21: G&R advised trailers will be brought on site Tuesday, 06/15.]
G&R	05/14/21 05/26/21	D02.	Progress Schedule (Bar Chart - 15 days NTP; CPM within 90 days). [05/26/21: G&R distributed the bar chart schedule and logistics plan at the meeting (copy attached).]
G&R	05/26/21 06/09/21	D04.1	Baseline Schedule: MBC requested that G&R prepare a baseline schedule for the specified 14-month project duration assuming timely delivery of joists. The purpose of the baseline is to enable MBC to compare it with the actual schedule based on delayed joist lead times. [06/09/21-Postscript: G&R distributed their baseline schedule (copy attached). G&R will formally submit a time extension request with back up as a Proposed Change Order (contract time revision).]

D05.

**E. SUBMITTAL SCHEDULE**

---	05/14/21 05/26/21 06/09/21	E05.	DiNisco will send G&R release for use of drawing files for submissions. [05/14/21-Postscript: DiNisco forwarded release to G&R to sign and return.] [05/26/21-Postscript: DiNisco advised G&R that, to expedite the process, G&R can sign and return the release; subcontractors' signatures are not required.] [06/09/21: Item complete.] Record Item.
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E06.

**F. SUBMITTALS**

G&R	05/14/21	F08.	Weather Protection / Temporary Heating Plan to be submitted within 30 days of NTP.
G&R	05/14/21	F09.	Construction Waste Management Plan to be submitted within 21 days of NTP.
G&R	05/14/21	F10.	Construction Indoor IAQ Plan to be submitted within 21 days of NTP.
---	05/26/21 06/09/21	F13.1	Priority Submittals: G&R requested an expedited review of the rebar shop drawings. [06/09/21: Rebar shop drawings returned 06/10/21.] Record Item.

--- 06/09/21 F14. Submittal Log: G&R reviewed submittal log (attached) noting metal  
06/11/21 culvert piping is a priority due to eight week lead time. [06/11/21-  
Postscript: Metal culvert returned 06/11/21.] Record Item.

F15.

## **G. COORDINATION DRAWINGS**

G06.

## **H. PAYROLL REPORTS**

H02.

## **I. REQUISITIONS**

G&R 05/14/21 I06. Schedule of Values shall be submitted ASAP for the Architect's and  
consultants' review and approval.

--- 05/14/21 I06.1 The schedule of values must be approved prior to being  
paid any moneys.

--- 05/14/21 I06.2 Schedule of Values shall include line items for close out  
06/09/21 documents and training. [06/09/21: It was discussed  
and agreed that the SOV will be broken down by  
building.]

DiNisco 06/09/21 I06.3 Draft SOV (Postscript): A draft SOV, including concrete,  
MBC foundations, roofing, ATC ceilings and miscellaneous  
and ornamental iron, was submitted for MBC and  
DiNisco review on 06/11/21

City 05/26/21 I08. Application for Payment #1: G&R will submit a pencil Application for  
06/09/21 Payment #1 for bond costs, etc. by EOD Friday, 05/27/21 with the  
goal of having a final requisition ready for signature at the 06/02 job  
meeting. It was agreed that G&R would have a breakdown of the  
General Conditions costs for Application for Payment #1.  
[06/09/21: Application for Payment #1 signed by DiNisco and MBC  
at the job meeting and was submitted to the City for payment.]

I09.

## **J. CHANGE ORDERS**

--- 05/26/21 J02. Change Order #1: DiNisco will prepare Change Order #1 for the  
05/28/21 electrical re-bid. [05/28/21-Postscript: Change Order #1 on hold  
06/09/21 pending outcome of bid protest.] [06/09/21: Change Order #1  
signed by G&R.] Record Item.

G&R      06/10/21   J03.   Change Order #2 (Postscript): On 06/10 DiNisco forwarded to G&R for signature Change Order #2 adjusting the contract sum as the result of the HVAC re-bid.

J04.

#### **K. CONSTRUCTION CHANGE DIRECTIVES (CCD)**

---      06/09/21   K02.   CCD Distribution: It was agreed CCD's will be distributed to G&R and MBC by email as well as on Submittal Exchange. Record Item.

K03.

#### **L. FIELD ORDERS**

---      06/09/21   L02.   Field Order Distribution: It was agreed Field Orders will be distributed to G&R and MBC by email as well as on Submittal Exchange. Record Item.

L03.

#### **M. PROPOSAL REQUESTS**

---      06/09/21   M02.   PR Distribution: It was agreed that Proposal Requests and Proposed Change Orders will be distributed by email as well as by Submittal Exchange. Record Item.

M03.

#### **O. REQUEST FOR INFORMATION**

G&R      05/26/21   O07.   RFI Log: G&R will have an RFI log on hand for review at each job  
06/09/21   meeting. [06/09/21: There are no open RFI's as of 06/09.]

---      05/26/21   O07.1   Priority RFI's: The design team shall expedite the review  
06/09/21   of RFI #001 as drain elevations could affect foundations.  
[06/09/21: RFI #001 has been responded to.] Record  
Item.

O08.

#### **P. DEMOLITION**

P01.

**Q. SITE WORK**

---	05/14/21 05/26/21	Q01.1	Blasting Survey (if necessary): To be submitted by G&R to WFD and coordinated with the City. In response to G&R's question, it was noted that the ESP Contractor drilled and mechanically removed the rock materials. [05/26/21: MBC suggested that G&R consider performing a pre-blast survey even if not thought to be needed so that there would not be a delay should rock be found.]
---	05/14/21	Q01.2	Electrical Service: DiNisco noted that the ESP removed rock for the primary electrical service as located by the electrical site plan in the south driveway.
G&R	05/14/21 05/26/21 06/09/21	Q04.	Temporary Offices: G&R will be moving offices to the site on or about 01 June. [05/26/21: G&R reported trailers will be in place in locations shown on the logistics plan by the end of the second week in June.] [06/09/21: Trailers expected on site 06/15.]
G&R	05/14/21	Q07.	G&R will coordinate the road work with the DPW (DOT).
G&R	05/14/21	Q08.	Foundation As-Built Survey: Tom Quinn informed G&R that they are to submit an as-built survey locating the buildings and tower foundation upon completion of the foundation work.
G&R	05/14/21 05/26/21 06/09/21	Q09.	Water Service: Establishing a temporary water service was briefly discussed. DPW noted that the nearest hydrant is across the street, and running a service from the hydrant in a trench will trigger DOT approval. G&R to coordinate temporary water with DPW. [05/26/21: DiNisco will contact DPW so that they may attend the 06/02 job meeting to discuss ways that water for construction purposes could be expedited.] [06/09/21: G&R has discussed temporary water with DPW. G&R will use a water truck until the DOT permit is granted and the permanent service is installed.]
HW	05/26/21	Q10.	Site Preconstruction Conference: A Preconstruction Conference for site work, including drainage and utilities, will take place at 1:00 PM, Wednesday, 06/16/21. Attending will be Horsley Witten and G&R's site contractor.

Q11.

**R. ARCHITECTURAL**

R01.

**S. STRUCTURAL**

---	05/26/21 06/09/21	S01.	Pre-foundation Construction Conference: It was discussed and agreed that a pre-construction conference will take place at 1:00 PM Wednesday, 06/02/21. Attending will be G&R's concrete and excavation contractors, FBRA, GZA and UTS. G&R has scheduled excavation for foundations to begin the second week of June at the Support Building with foundations to follow. [06/09/21: The foundation pre-construction meeting took place on 06/09. G&R's agenda with notes from the meeting is attached. G&R's agenda also included items for discussion provided by FBRA. The following was noted during the course of discussions.]
---	06/09/21	S01.1	Submittals were reviewed as follows:
G&R	06/09/21	S01.1.01	Historical break results should be submitted with mix designs.
G&R	06/09/21	S01.1.02	G&R will submit construction joint locations / details for approval.
DiNisco	06/09/21	S01.1.03	Site concrete shop drawings still under review. DiNisco noted tower foundation will be on hold pending review by tower vendor once tower quotes are in 06/25/21.
G&R	06/09/21	S01.2	QA/QC issues were discussed.
---	06/09/21 06/15/21	S01.2.01	Formwork submittals yet to be made. [06/15/21- Postscript: Submittal received 06/14 and returned 06/15/21.] Record Item.
---	06/09/21	S01.2.02	Hot Weather Concrete: G&R to advise if ice will be used to lower concrete temperatures. If so, FBRA advised that ice should be included as part of the total water included in the mix. Boston Concrete should also advise if, and how much, water is being withheld for addition at site during pour.
---	06/09/21	S01.2.03	Concrete Age: It is specified that no more than 90 minutes should elapse between plant and pour. It was discussed that trucks will not be automatically turned away if a few minutes late, but every effort should be made to meet this requirement. G&R will make the judgment based on considering all factors and the ramifications of proceeding.
---	06/09/21	S01.2.04	FBRA stated forms may be stripped in two days (48 hours) if concrete has reached 30% of strength. UTS could cast additional cylinders and do a 48 hour break.
---	06/09/21	S01.3	Testing / inspection issues were discussed.



---	06/09/21	S01.3.01	GZA will visit site to witness first bottom of footing excavation and initial backfilling. GZA requested two days notice of requested visits. In response to a question, GZA noted crushed stone is not needed below footings if excavation is in the "new fill" placed by early site contract.
---	06/09/21	S01.3.02	FBRA will made periodic visits to view progress of reinforcing, etc. However, FBRA stated their visits are not to confirm reinforcing placement per the approved shop drawings, which is the responsibility of UTS.
---	06/09/21	S01.3.03	UTS should email every test result to the Building Department.
---	06/09/21 06/15/21	S01.3.04	DiNisco and UTS will update the test report cc list. [06/15/21-Postscript: DiNisco and G&R cc list provided to UTS on 06/15/21.]

S02.

#### **T. FIRE PROTECTION**

T02.

#### **U. PLUMBING**

U01.

#### **V. HVAC**

V01.

#### **W. ELECTRICAL**

W01.

#### **X. HAZARDOUS MATERIALS**

X01.

#### **Y. MISCELLANEOUS**

---	05/14/21 05/26/21 06/09/21	Y12.1	The next job meeting will be 05/26/21. The 05/26/21 and the 06/02/21 meetings will be held in the Engineering Conference Room in City Hall. [05/26/21: Because the trailers will not be set up, the 06/09 job meeting will also be held at City Hall.] [06/09/21: Because the trailers will not be completely set up, the 06/16 job meeting will be held at City Hall.]
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Y13.

**Z. LEED-S**

Z02.

**ZA. COMMISSIONING**

Subs      05/14/21   ZA01. Work of the required SECTIONS requiring Commissioning shall include a separate line item value for this work on the Schedule of Values.

ZA03.

**ZB. CONSTRUCTION CLOSEOUT**

ZB10.

**ZZ. CONSTRUCTION PROGRESS**

---      06/09/21   ZZ02. Construction Progress: Excavation equipment has been mobilized onto the site. Record Item.

ZZ03.

The next Job Meeting will be held **Wednesday, June 16, 2021 at 1:00 PM in the Engineering Conference Room at City Hall.**

The discussions of this meeting are recorded as understood by the writer, who should be notified of any omissions or corrections. Unless the writer is notified to the contrary, these notes are presumed to be correct.



Richard N. Rice  
DiNISCO DESIGN

RNR/meh

cc: Mayor Scott Galvin  
Tom Quinn, Building Commissioner  
Brian Gingras, Paul D'Amore, Building Inspectors  
Jay Corey, City Engineer  
Jay Duran, DPW Superintendent  
Donald Kenton, WFD  
George Poole, WFD  
Pat Saitta  
Dick Murphy  
Janet Bernardo  
Mary Hall  
Heather Audet  
Bill Brown  
Joe Strayer  
Jon Buhl  
Steven Belanger  
Rachel Blandford  
John Sousa  
Frank Stramaglia  
Semoon Oh  
Jared Humphreys  
Kevin Murphy  
Eric Ganz  
Scott Goodrich  
Chick Langone  
Anne Woodacre  
Bob Morel  
Ian McCallion  
Dan Aylward  
David Bacchiocchi

Enclosures: G&R Baseline Schedule dated 09 June 2021 (no joist delay)  
G&R 3-week Look Ahead dated 06/09/21  
G&R Submittal Log dated 06/08/21  
G&R Foundation Pre-Installation Meeting Agenda / Meeting Notes

# Woburn Fire Headquarters

## Project Schedule Outline

**Date Issued: June 9, 2021**

W/ NO JOIST DELAY

[illegible]

[illegible]

## Woburn Fire Headquarters

### 3 Week Look Ahead Schedule - Period thru June 25th, 2021

**Prepared by: Dave Bacchiocchi**

**Date Issued: June 9, 2021**

[illegible]





Report By: Ian McCallion

Report Type: Open Items  
 Project: Woburn Fire Headquarters  
 Log: Submittal

Date: 6/08/2021

Total Items: 9

Days Open Calculated by: Calendar Days since date Initially Created

Section	Item#	Description	Supplier or Manufacturer	Date from Subcontractor	Date from GC	Review by Consultant	Review by Architect	Return to Subcontractor	Action	B-I-C	Days Open
033000 Cast-in-Place Concrete	033000-004-0	Concrete Reinforcing Shop Drawings - Site Items	Rebars and Mesh	05/28/2021	05/28/2021					Consultant, Arch	11
312000 Earthwork	312000-002-0	Dense Grade - Test Report	RJ Pelchat	06/02/2021	06/02/2021					Consultant, Arch	6
312000 Earthwork	312000-003-0	Crushed Stone - Test Report	RJ Pelchat	06/02/2021	06/02/2021					Consultant, Arch	6
330514 Manholes & Structures	330514-001-0	Catch Basin - Shop Drawings		06/03/2021	06/03/2021					Consultant, Arch	5
330514 Manholes & Structures	330514-002-0	Drainage Manhole - Shop Drawings		06/03/2021	06/03/2021					Consultant, Arch	5
330514 Manholes & Structures	330514-003-0	Sewer Manhole - Shop Drawings		06/03/2021	06/03/2021					Consultant, Arch	5
330514 Manholes & Structures	330514-004-0	Area Drains - Shop Drawings		06/03/2021	06/03/2021					Consultant, Arch	5
334923 Storm Drainage Water Retention Chambers	334923-001-0	Subsurface Infiltration System #02 - Shop Drawings		06/03/2021	06/03/2021					Consultant, Arch	5
334933 Storm Drainage Underground Infiltration Aluminized Type II Corrugated Metal Pipe (CMP)	334933-001-0	Subsurface Infiltration System #01 - Shop Drawings	RJ Pelchat	06/02/2021	06/02/2021				HOT Long Lead Item	Consultant, Arch	6



# Pre-Installation Meeting Agenda

## Woburn Fire Headquarters

G&R Project# 21-005

**MEETING MINUTES – Additional Notes in RED**

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**Meeting Date / Time:** June 9, at 1:00 – **Minutes submitted 6/15/21**  
**Location:** Woburn City Hall / Engineering Conference Room

**Meeting Topic:** **Concrete Foundation Pre-Installation Meeting**

### Introductions/Responsibilities:

- |                                    |  |
|------------------------------------|--|
| • G&R Construction:                | General Contractor   |
| • Dinisco Design:                  | Architect  |
| • Foley Buhl Roberts & Associates: | Structural Engineer  |
| • GZA                              | Geotechnical Engineer                                      |
| • Municipal Building Consultants:  | Owners Project Manager                                     |
| • Glavin Construction:             | Formwork Installer   |
| • Boston Concrete:                 | Concrete Ready-Mix Supplier                                |
| • Rebars & Mesh:                   | Rebar & Mesh Supplier                                      |
| • UTS of Massachusetts:            | Material Testing Agency for compaction, rebar, & concrete. |
| • Sky Structures:                  | Anchor Bolt & Leveling Plate Supplier                      |
| • RJ Pelchat Excavating:           | Sitework Excavation & Backfill Operations.                 |

### Onsite Restrictions / Requirements:

- All equipment & trucking should enter through the main Gate# 1 from Main Street & loop through the site and either exit back out through Gate# 1 or #2 onto Main Street. **(Refer to Attached Site Logistics Plan)**
- Main Street is a very busy road with direct access to the highway. There is absolutely no standing or parking on street. All trucks must be able to wait within the site boundary. There may be standing capabilities at the Showcase Cinemas located on Middlesex Canal Park Drive. There is a large parking lot on this road but it is privately owned.
- Working hours are between 7:00 – 5:00. Absolutely no starting large equipment before 7:00 AM due to the surrounding neighborhood & City ordinance. Saturday work must be approved by the city with advanced notice.
- The onsite OPM needs to be notified Two days in advance in order to contact the testing agency. This needs to be coordinated with G&R as well. Architect should be notified on Pours **THREE** Days in advance.
- Subs must provide unrestricted access for testing agencies and/or inspectors at all times. This includes staging and/or lift access.



- There is parking onsite located at areas indicated in the logistics plan. Please note that this plan is an early draft and that certain areas will change. G&R will coordinate with all subcontractors working on site with advanced notice.

#### Submittals:

- 033000-001 – Concrete Reinforcing Shop Drawings (Headquarters Foundation & SOG) – **Approved as Noted**
  - Comments include minor detail mark ups & corrections
  - **Detail at Approach Slab Tie in Required – See Resubmittal 6/14/21**
  - **Resubmit Sheet R1.01 for record – See Resubmittal 6/14/21**
  - **G&R & Glavin to show construction joints on Record Shops for review See Mark Ups on Resubmittal 6/14/21**
- 033000-003 – Concrete Reinforcing Shop Drawings (Support Building) – **Approved as Noted**
  - Comments include minor detail mark ups & corrections
  - **Detail at Approach Slab Tie in Required – See Resubmittal 6/14/21**
  - **Resubmit Sheet R3.01 for record – See Resubmittal 6/14/21**
  - **G&R & Glavin to show construction joints on Record Shops for review – See Mark Ups on Resubmittal 6/14/21**
- 033000-005 – Concrete Mix Designs – **Revise & Resubmit**
  - Footings, Piers, Foundation Walls, & Grade Beams – **Minimum 517 lb cement. Maximum 25% slag acceptable in mix. – See resubmittal 6/14/21**
  - **Air content to be 4 +/- 1 % - See Boston Concrete Response – “Industry norm for % of air in exposed concrete is 6% +/- 1.5 - Reviewed and at discretion at meeting**
  - **Provide Test Data per ACI on each mix – See resubmittal 6/14/21**
- 033000-006 – Foundation Formwork Accessories – **Approved as Noted**
  - Grout is not approved – **Glavin to indicate the intent. Is this for Leveling plates? – For Plates – see resubmittal 6/14/21**
- 051200-001 – Anchor Bolt Shop Drawings – **Approved as Noted**
  - Comments include minor corrections on base plate thickness
- 070001-001 – Below Grade 2 Inch Rigid Insulation Protection Board – **To Be Submitted – Submitted 6/14/21**
- 070001-002 – Below Grade Dampproofing Product Data – **To Be Submitted – Submitted 6/14/21**
- 312000-003 – Dense Grade — **Submitted – Need Returned – Testing Info Submitted 6/14/21**
- 312000-003 – Crushed Stone – **Submitted - Need Returned – Testing Info Submitted 6/14/21**
- **Hot Weather Concrete Plan to be submitted – Will be submitted this week.**

#### Questions / Issues / RFI's/CR's:

- RFI #001 – Elevations of Plumbing Inverts at Foundation Walls – Rebars & Mesh have confirmed the changes. Plumber has reviewed. Awaiting Glavin Response
- Hot Weather Concrete Practices – Potential hot weather placement can happen this time of the year.
- Need Radio Tower Information for Foundation Work. Rebar needs to be submitted.

**Subcontractor Coordination:**

- G&R working with MEP trades on sleeves required at foundation walls. Plumbing underground coordination drawings are in process. Xcel Fire Protection to coordinate as well.
- Primary trade coordination is between Sitework contractor & formwork installer with footing base prep along with backfill operations.
- MEP trades are to turn over sleeves for pipe/conduit penetrations or boxouts with dimensioned location coordination plan for installation by Glavin Construction.
- Underground MEP Coordination drawing development is underway. Electrician Contract just signed due to protest and HVAC is still open.
- NO Elevator on the project.
- Vertical waterproofing at foundation walls prior to backfill.
- 2" Rigid insulation Protection Board will be installed by the waterproofing contractor once dampproofing is applied.
- Embedment plates, anchor bolt locations, with grout leveling plates.

**Quality Control Concerns / Specification Requirements:**

- Provide Class A tolerances for all visually exposed concrete surfaces and Class C tolerance for other concrete surfaces.
- Forms for concrete surfaces not exposed to view in finished work shall be made of wood, metal, or other material subject to approval of the architect. Exposed surfaces should be formed in High Density Overlay Plyform. – **Specialty Formwork submitted 6/14/21**
- Form release agent shall be non-staining for all of the foundation, piers, and footings. Concrete mix for Footings and Foundation Walls to be 3000 PSI with 4% +/- 1%. The exposed walls shall be the 4,000 psi with 6% +/- 1%.
- Joints to be placed at a maximum 80 Feet at walls. Time period between adjacent concrete pours on either side of the construction joint shall not be less than 72 hours.
- Hot weather concreting shall be in accordance with ACI 305, "Recommended Practice for Hot Weather Concreting."
  - When temperatures rise above 80 degrees F all surfaces of concrete shall be protected against rapid drying.
  - Concrete delivered to the forms shall have a temperatures of not over 90 degrees F.
  - The temperature of the forms shall not be over 90 degrees F.
- Concrete Batching and placement time frame shall not exceed 90 minutes – **Depending on Conditions GC to make well thought out call on accepting and placing slightly late deliveries.**
- Concrete Delivery Tickets shall indicate the amount of water held back at the plant (if applicable). Testing Agency will confirm that water added at the site does not exceed that which was held back at the plant.
- Concrete shall be deposited continuously, in horizontal layers not deeper than 18 inches. Embed no pipes other than electrical conduit in structural concrete.
- Exposed Vertical Surfaces – Immediately after removal of forms finish surfaces to specified requirement. See spec for instructions.
- Foundation Wall Areas: Primary building Foundation, Support Building Foundation, Radio Tower Base (sheet 2.6.01 need information from City), 3 Flagpole Bases (detail 9/1.5.02), Sign Wall Foundation (detail on 5/1.5.02).

- Waterstops: Install continuous Bentonite strip waterstop at vertical and horizontal below grade wall construction joints. Installation shall be in accordance with manufacturer's recommendations.
- Temp of concrete cannot exceed 90 degrees or below 50 degrees or it will be turned away.
- Protect new concrete against low and high temperature and rapid loss of moisture for at least 7 days at a temperature of at least 50 degrees F. by approved curing methods.
- Vertical surfaces may be cured by maintaining wood forms continuously wet during curing period or by wrapping with polyethylene and taping joints.
- Formwork for pilasters, walls, and other parts not supporting the weight of concrete may be removed as soon as the concrete has reached 30% of its 28-day strength but not before 2 days. Foundation walls retaining earth shall not be back filled until concrete has achieved the specified 28-day strength.
- An approved set of rebar shop drawings must be onsite for verification by all inspectors and use of Architect and OPM.
- Layout Control: What type of line & grade control points does Glavin want from us?

#### **Testing & Inspection Requirements:**

- Material Testing Requirements:
  - Concrete Cylinders (Total of 4 sets 6" x 12" Testing Cylinders or 6 sets of 4" x 8" cylinders): Spec calls for 1 at 7 days, 2 or 3 (depending on sized indicated) at 28 days, & save 1 or 2 (Depending on Cylinder size) for 56 days if 28 day fails.
  - Take cylinders for every 50cy of concrete placement or each occurrence. Cylinder storage location to be confirmed onsite by G&R / OPM.
  - Rebar placement inspections.
  - Compaction testing at bottom of footings at 95% in 10" lifts.
  - Compaction testing at foundation wall backfill at 95% in 10" lifts.
- Inspection Requirements:
  - Geotechnical Engineer inspection at bottom of footings? **2 Days notice. Re-Compaction to be observed as work gets going.**
  - Structural Engineer inspection of rebar placement during the first wall placement & periodically after? **Structural Engineer will work off of Test Reports**
  - Building Commissioner/ Inspector: Do they to be notified for foundation placement?

#### **Safety Concerns:**

- Rebar caps MUST be applied to all exposed rebar
- Holes & trip hazards must be covered and marked immediately.
- Ladders for access out of footing pits.
- Concrete truck activity must not idle on the adjacent roads, bring them into the jobsite.
- Outriggers with kickers, braces, & rails for working the high wall forms.
- Banking back excavation holes per OSHA standards.
- Backup alarms on site equipment & lulls.

#### **Mockup:**

- There are (2) exterior mockup walls that we will need a small foundation with brick shelf poured. See Addendum #1 (001A SKA & 001B SKA).

**Material Handling & Procurement:**

Material deliveries must be made between the hours of 7:00am – 2:00pm:

- Rebar Delivery (Foundations) – **First Deliveries will take place the week of June 14th.**
- HD Supplier accessories (waterstop, cement brick, etc.) – **To be ordered by the Field.**
- Anchor bolts & Steel Columns: **Released, awaiting shipping date.**
- Rigid Insulation: **In Stock.**

**Scheduling / Phasing Milestones:**

- |   |                             |
|---|-----------------------------|
| • Site Mobilization / Sanitary Line Installation: | Trying to Start end of week |
| • Foundation Form Work Mobilization:              | 6/21                        |
| • Form & Pour Support Bldg. Foundations:          | 6/21 – 7/23 (4w)            |
| • Form & Pour Headquarters Bldg. Foundations:     | 7/12 – 8/27 (6w)            |

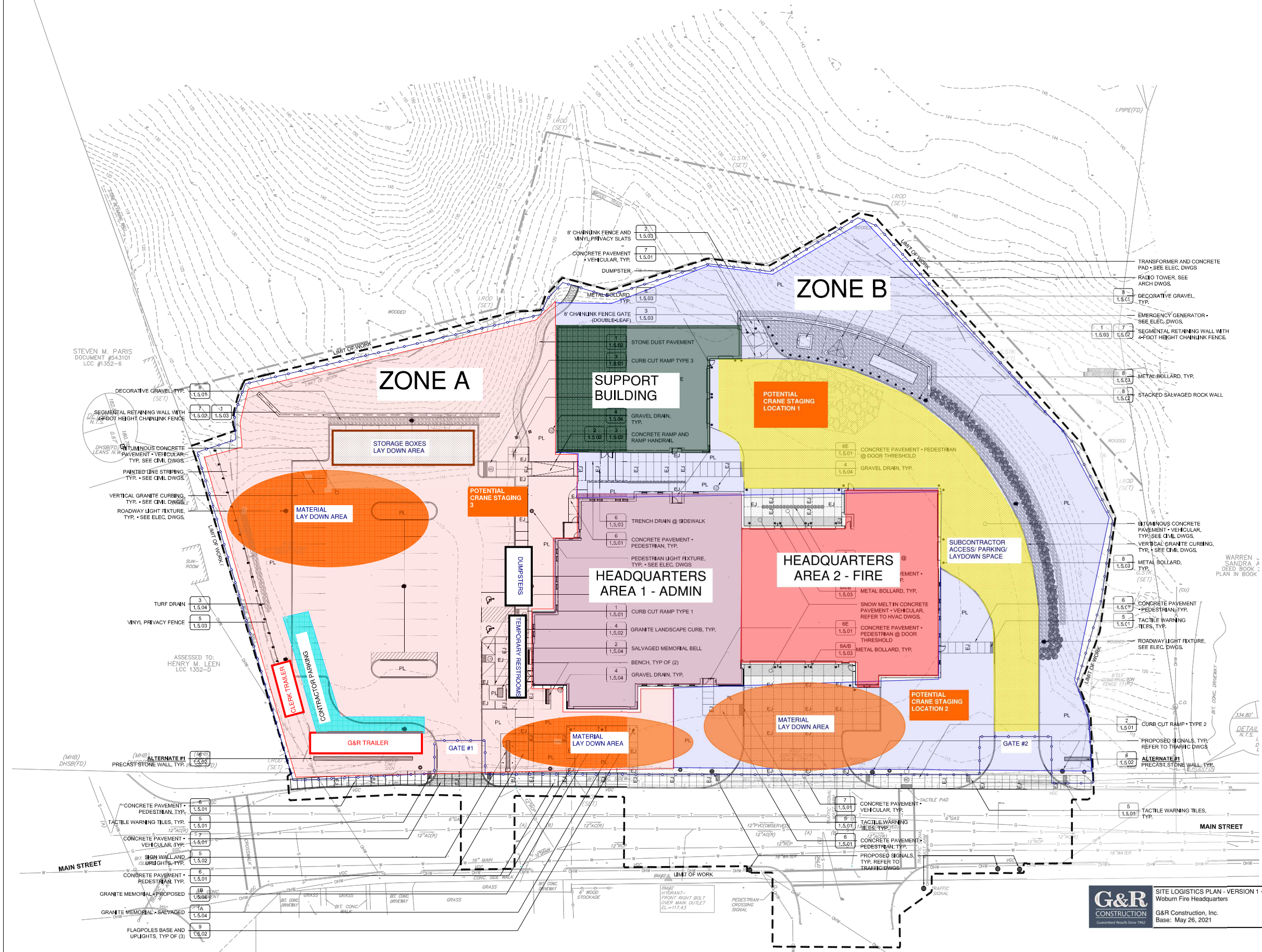
**Attachments:**

Preliminary Site logistics Plan

Foley Buhl Roberts & Associates Field Checklist



WOBURN, MA



## **WOBURN FIRE HEADQUARTERS**

### **FOLEY BUHL ROBERTS & ASSOCIATES, INC.**

#### **Concrete Foundation Construction - Field Checklist**

June 9, 2021

**The following is a partial list of concrete foundation construction requirements for the project. Refer to the Contract Drawings, Specifications, and the Statement of Special Inspections for additional requirements.**

#### **1. General:**

- a. Submit concrete mix design(s) and complete shop drawings for foundation reinforcing. Shop drawings shall indicate proposed construction joint locations (80 feet maximum for walls).
- b. Prior to placement of footings, all bearing surfaces shall be inspected by the Geotechnical Engineer or the Owner's Testing Agency.
- c. All reinforcing shall be inspected by the Testing Agency for grade, size, spacing, position, cleanliness, cover and support.
- d. Contractor to cooperate with the Testing Agency's work and provide assistance as required for taking and storing concrete samples. Provide storage facilities for concrete cylinders at the site.
- e. Notify related trades and coordinate installation of chases, inserts, sleeves, anchors, anchor bolts, embedded plates, louvers, and all wall/footing penetrations. No unapproved wall or footing penetrations allowed.

#### **2. Forming:**

- a. Provide Class A tolerances for all visually exposed concrete surfaces and Class C tolerance for other concrete surfaces.
- b. Treat forms with form release agent. Two coats for first use and one coat for each additional use.

#### **3. Placing/Testing:**

- a. Notify architect at least 72 hours prior to each concrete placement.
- b. Hot weather concreting shall be in accordance with ACI 305, "Recommended Practice for Hot Weather Concreting". Submit proposed hot weather concreting procedures.
  - When temperature rises above 80 degrees F., all surfaces of concrete shall be protected against rapid drying.
  - Concrete delivered to the forms shall have a temperature of not over 90 degrees F.
  - The temperature of the forms shall not be over 90 degrees F.

It is particularly important the freshly placed concrete be protected from direct sunlight and rapid drying/evaporation from wind.

- c. Time lapse between concrete batching and placement shall not exceed 1½ hours.
- d. Concrete delivery tickets shall indicate the amount of water held back at the plant (if applicable). Testing Agency shall confirm that water added at the site does not exceed that which was held back at the plant.
- e. Concrete shall be deposited continuously, in horizontal layers not deeper than 18 inches.

#### **4. Finishing:**

- a. Finishing requirements for exposed to view and concealed vertical wall surfaces shall be in accordance with the Specifications.
- b. Patching, if required, shall conform to Specification requirements and shall be subject to Architect's final acceptance.

#### **5. Curing and Protection:**

- a. Protect new concrete against low and high temperatures and rapid loss of moisture for at least 7 days at a temperature of at least 50 degrees F. by approved curing methods.
- b. Vertical surfaces may be cured by maintaining wood forms continuously wet during curing period or by wrapping with polyethylene and taping joints.

#### **6. Form Removal:**

- a. Formwork for pilasters, walls and other parts not supporting the weight of concrete may be removed as soon as the concrete has reached 30% of its 28-day strength but not before 2 days.
- b. Foundation walls retaining earth shall not be backfilled until concrete has achieved the specified 28-day strength.